

REMARKS

An Office Action was sent from the U.S. Patent and Trademark Office on December 30, 2002, carrying a response due date of March 30, 2003. As such, Applicants have requested a one month extension of time and has enclosed the required fee.

Specification

The specification was objected to because of the use of trademarks. Applicants have capitalized the trademarks where they appear and inserted generic terminology describing the trademarks.

The first paragraph on page 7, lines 1 through 7, has been amended by capitalizing PATHODX[®] and inserting the generic description "blood-typing cardboard substrate cards." The second paragraph on page 7, lines 8 through 13 has been amended by capitalizing STABILICOAT[®] and inserting the generic description "a blocking reagent." The last paragraph of page 7 which begins at line 22 and continues onto page 8 through line 8 has also been amended by capitalizing STABILICOAT[®] and inserting the generic description "a blocking reagent."

The paragraph which begins on page 8 at line 18 and continues on page 9 through line 3 has been amended by capitalizing DISPENSTIR[®]. Finally, the paragraph beginning on page 9 at line 23 and continuing on page 10 through line 8 has been amended by capitalizing PATHODX[®].

These amendments address the Examiner's concerns and place the specification in proper form for issuance.

Claim Rejections under 35 U.S.C. §112 second paragraph

The Examiner has rejected Claims 1-18 and 22 under 35 U.S.C. Section 112, second paragraph for being indefinite for failing to particularly point out and distinctly claim the subject matter of the invention. Applicants have amended the claims to distinctly claim the subject matter of the invention.

Claims 1, 9, 12, 13 and 22 were rejected as vague and indefinite based on the inclusion of the word "member" with substrate. Applicants have amended these claims to delete the word "member." Claims 1 and 22 were rejected due to the use of the term "facilitating," Claims 1 and 22 have been amended by deleting the word "facilitating" and inserting the phrase "which allows."

Claims 2, 3 and 14 have been amended by specifying "said first or said second" monoclonal antibody, creating antecedent basis.

Claim 12 has been amended to clearly recite that the substrate includes a mixture of the antibodies, thus clarifying the claim. Claim 12 has been further amended by deleting the word "recognizing" and inserting therefore the word "agglutinates" to more clearly explain what happens between the antibodies and the feline blood, and to explain the connection between agglutination and typing feline blood samples.

Claim 13 has been further amended by deleting "EDTA" and inserting "ethylene diaminetetracetic acid" therefor as required by the Examiner. Further, Claim 13 has been amended to refer to "the feline subject" rather than "each cat" as requested by the Examiner.

Claims 15 and 16 have been amended to delete the reference to "13G3 and 4E10 and insert therefor references to antibodies recognizing glycolipid A antigen (NeuGc)G_{T3} and glycolipid A antigen (NeuGc)₂G_{D3}, respectively.

Claim 17 has been amended by deleting the word “sufficient” which the Examiner found to be subjective and instead refer to observing agglutination.

Claim 18 has been amended to add specific steps related to determining feline blood type based on the presence or absence of agglutination.

Claim 22 has been amended to clearly indicate that the monoclonal antibodies are in a mixture.

Finally, new Claim 23 has been added to define the first or second monoclonal antibody as recognizing glycolipid A antigen (NeuGc)G_{T3}.

Applicants believe that these amendments more clearly define the invention, overcome the Examiner’s rejections and place the application in proper form for allowance.

Claim Rejections under 35 U.S.C. §102(b)

Claims 1-5, 9-14, and 17-18 were rejected under 35 U.S.C. §102(b) as being anticipated by Green et al. (Comparative Haematology, 2000).

Applicants assert that Green, et al. is not a proper 35 U.S.C. Section 102(b) reference since the publication date of Green, et al. is less than 1 year prior to the July 26, 2001 filing date of the current application. Vol. 10, Issue #1 of Comparative Haematology was shipped on July 25, 2000. According to MPEP Section 706.02, “a magazine is effective as a printed publication under 35 U.S.C. Section 102(b) as of the date it reached the addressee and not the date it was placed in the mail. *Protein Foundation, Inc. v. Brenner*, 260 F. Supp. 519, 151 USPQ 561 (D.D.C. 1966).” Thus, this reference was not published more than 1 year prior to the filing date of the current application and should therefore not be considered prior art with regards to the current application.

Claim Rejections under 35 U.S.C. §102(e)(2)

In the Office Action, the Examiner rejected Claims 1-5, 10-12, 14, and 17-18 under 35 U.S.C. Section 102 (e)(2) based on Green et al. (AVHTM meeting, 2001). In a telephone conference, the Examiner determined that the rejection should have been based on Section 102(a). Therefore, the Applicant is addressing the rejection as being under Section 102 (a). The Examiner states that Green teaches determining feline blood type using monoclonal antibodies 13G3 and 4E10 that are added to feline blood samples and tested for reaction by direct agglutination reaction.

The Applicants have attached a 37 CFR Section 1.131 Declaration of Gordon A. Andrews and Exhibits A through C, which indicate a date of invention prior to the Green reference's publication date of May, 2001.

Exhibit A is made up of copies of pages from the laboratory notebook of Sue Chavey, Gordon Andrew's assistant, including laboratory notebook pages for April 26, 27, and 29, 1999. Please note the reference at the bottom of the second page to the fact that the 4E10 and 13G3 antibodies were mixed on April 26, 1999. Exhibit B is made up of copies of Sue Chavey's laboratory notebook pages for May 3, 2000, indicating the 13G3 and 4E10 MoAbs were mixed. Exhibit C is a copy of Sue Chavey's laboratory notebook page for February 22, 2001, indicating the lyophilized cards with a mixture of the 4E10 and 13G3 MoAbs work well after 9 months in storage.

According to the declaration, the inventors mixed the monoclonal antibodies (MoAbs) 4E10 and 13G3 at least as early as April 26, 1999 in their laboratory at Kansas State University, in order to determine the effectiveness of mixing the two MoAbs. (See Paragraphs 2 – 4 of the Andrews Declaration and Exhibit A). Based on their results, the inventors continued to work with mixtures of 13G3 and 4E10 MoAbs. On or about May 3, 2000, MoAbs 13G3 and 4E10

where mixed on blood typing cards in the inventors' laboratory. (See Paragraph 5 of the Andrews Declaration and Exhibit B). Further, cards containing a mixture of 13G3 and 4E10 MoAbs were tested in the inventors' laboratory on or about February, 22, 2001. (See Paragraph 6 of the Andrews Declaration and Exhibit C). Thus Applicants have shown an actual date of invention prior to the May, 2001 publication of Green et al. at the AVHTM meeting.

Claim Rejection under 35 U.S.C. §103(a)

Claims 6-8, 15-16, and 22 were rejected under 35 U.S.C. §103(a) as being unpatentable over Green et al. (Comparative Haematology, 2000). Green et al. was published in July, 2000. As previously noted, Applicants have attached a 37 CFR Section 1.131 Declaration of Gordon A. Andrews and Exhibits A through C, which indicate a date of invention prior to the Green reference's publication date of July, 2000. According to the declaration, the inventors mixed the monoclonal antibodies (MoAbs) 4E10 and 13G3 at least as early as April 26, 1999 in their laboratory at Kansas State University, in order to determine the effectiveness of mixing the two MoAbs. (See Paragraphs 2 – 4 of the Andrews Declaration and Exhibit A). Based on their results, the inventors continued to work with mixtures of 13G3 and 4E10 MoAbs. On or about May 3, 2000, MoAbs 13G3 and 4E10 were mixed on blood typing cards in the inventors' laboratory. (See Paragraph 5 of the Andrews Declaration and Exhibit B). Further, cards containing a mixture of 13G3 and 4E10 MoAbs were tested in the inventors' laboratory on or about February, 22, 2001. (See Paragraph 6 of the Andrews Declaration and Exhibit C). Thus Applicants have shown an actual date of invention prior to the July, 2000 publication of Green et al. in Comparative Haematology.

Based on the Andrews Declaration, it is clear that the Applicants actual date of invention is prior to both of the cited references. Therefore, the current application should be allowed to issue.

It is asserted that the amendments to the specification and claims have placed the application in proper form for allowance. As such, it is respectfully requested that the present invention be allowed.

If the Examiner has any suggested changes, which would place the present application in condition for allowance, please contact Applicants' attorney at the number listed below.

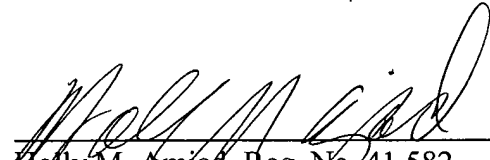
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Respectfully submitted,

POLSINELLI SHALTON & WELTE, P.C.


Molly M. Amjad, Reg. No. 41,582
700 W. 47th Street, Suite 1000
Kansas City, MO 64108-1802
Tel: (816) 360-4280 - ext 4294
Fax: (816) 753-1536
Attorney for Applicants

27281 / 55280
HMAMJ 997739